Division of Air Quality Permit Application Submittal

Please find attached a permit application for:

[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only):
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):
- Type of NSR Application (check all that apply):
 - o Construction
 - o Modification
 - O Class I Administrative Update
 - O Class II Administrative Update
 - Relocation
 - o Temporary
 - Permit Determination

- Type of 45CSR30 (TITLE V) Application:
 - o Title V Initial
 - O Title V Renewal
 - Administrative Amendment**
 - O Minor Modification**
 - Significant Modification**
 - Off Permit Change
- **If the box above is checked, include the Title V revision information as ATTACHMENT S to the combined NSR/Title V application.

- Payment Type:
 - O Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
 - O Check (Make checks payable to: WVDEP Division of Air Quality)
 Mail checks to:

WVDEP – DAQ – Permitting Attn: NSR Permitting Secretary 601 57th Street, SE Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

- If the permit writer has any questions, please contact (all that apply):
 - O Responsible Official/Authorized Representative
 - Name:

Charleston, WV 25304

- Email:
- Phone Number:
- Company Contact
 - Name:
 - Email:
 - Phone Number:
- Consultant
 - Name:
 - Email:
 - Phone Number:



Sent via Email this Date

November 19, 2020

135 S. LaSalle Street, Suite 3500 Chicago IL 60603 T +1 312 541 4200

Attn: Steve Pursley
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

RE: Latham Pool Products, Inc. – Jane Lew Application for Reg. 13/30 Amendments for RC-RTO Installation R13-2332G / R30-04100045-2017(MM01)

Dear Mr. Pursley:

Consistent with the Division of Air Quality (DAQ) guidance during the Covid-19 pandemic, RPS is submitting via email the attached combined Reg. 13 and Reg. 30 Modification Amendment application on behalf of the Jane Lew facility of Latham Pool Products, Inc. (Latham).

Latham is requesting two anticipated facility and operational changes to be reflected in modified Reg. 13 and Reg. 30 permits.

- 1. Latham intends to construct a curing room, which will adjoin the Pool Production building. There will essentially be no emissions attributable to the new curing room.
- 2. A rotary concentrator and regenerative thermal oxidizer (RC-RTO) will be installed to abate VOC emissions from gelcoat and vinyl ester resin application for EU-1B (Pool Production). General purpose polyester resin emissions will not be controlled by the new RC-RTO. This will require the construction of a dividing wall within the Pool Production Building to allow such emissions to be separately captured. There will be no net change in EU-1B and facility-wide VOC emission limits.

Latham would like permit language that allows the operational flexibility to have emissions from gelcoat and vinyl ester resin application to be released to the atmosphere uncontrolled, effectively by-passing the RC-RTO, when it is economically and operationally beneficial startup, operate, and/or shutdown the new control device.

Latham has not yet chosen a vendor to provide the RC-RTO. Information contained in this application is the best available at present, and reflects the essential characteristics of the unit. To the extent necessary, Latham will provide the DAQ with updated information once the final selection has been made. In any case, the minimum overall VOC destruction efficiency will be 90%.

The company intends to employ essentially the same method of parametric emissions monitoring/recordkeeping, tracking distinct quantities of materials used while the RC-RTO is in operation and when it is being by-passed. Because there is not applicable regulatory provision that would require a short-term VOC emission limit, Latham believes additional measures and/or instrumentation to monitor emissions are not justifiable.

www.rpsgroup.com

Please note that Attachment P: Affidavit of Publication will be submitted shortly after the application, as per the Application for NSR Permit and Title V Permit Revision form instructions. RPS will provide DAQ with a copy of the legal notice content for their review and comment prior to publication.

The permit amendment application fee will be timely paid electronically in accordance with Covid-19-related procedures established by the DAQ.

This project represents a \$1.6 million capital investment, which will allow Latham to respond to current, unprecedented market demand for its products, and add 50 full-time employees to its payroll.

- o O o -

Latham and RPS look forward to working with WVDEP on this very important, time-critical undertaking.

Please contact me directly at (312) 262-4371 or Christopher.Blume@rpsgroup.com if you require any additional information or clarification to act upon this application.

Sincerely,

RPS

Christopher Blume, P.E.

Vice President

Att: Reg. 13/30 RC-RTO Amendment Application

cc: Theresa Elliott

Rick Knicely Chris Findley



Latham Pool Products, Inc. Jane Lew, West Virginia Reg. 13 / Reg. 30 Permit Amendment Application

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	TION MODIFICATI
☐ CLASS I AD	MINISTRATIVE UPDATE
☐ CLASS II AI	OMINISTRATIVE UPDAT
	E V FACILITIES ONLY: ix A, "Title V Permit Rev

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF AIR QUALITY 601 57th Street, SE Charleston, WV 25304 (304) 926-0475 www.dep.wv.gov/daq	APPLICATION FOR NSR PERMIT AND TITLE V PERMIT REVISION (OPTIONAL)				
PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF KNOWN CONSTRUCTION MODIFICATION RELOCATION CLASS I ADMINISTRATIVE UPDATE TEMPORARY CLASS II ADMINISTRATIVE UPDATE AFTER-THE-FACT	☐ ADMINISTRATE SIGNIFICANT	PLEASE CHECK TYPE OF 45CSR30 (TITLE V) REVISION (IF ANY): ADMINISTRATIVE AMENDMENT MINOR MODIFICATION SIGNIFICANT MODIFICATION IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS ATTACHMENT S TO THIS APPLICATION			
FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revis (Appendix A, "Title V Permit Revision Flowchart") and ability	to operate with the				
	I. General				
 Name of applicant (as registered with the WV Secretary of Statham Pool Products, Inc. 	State's Office):	2. Federal I	Employer ID No. <i>(FEIN):</i> 27-1694029		
3. Name of facility (if different from above):		4. The applic	cant is the: ☐OPERATOR ☑ BOTH		
5A. Applicant's mailing address:	5B. Facility's prese	ent physical a	ddress:		
P.O. Box 550 Jane Lew, WV 26378	176 Viking Drive Jane Lew, WV 2637	8			
 6. West Virginia Business Registration. Is the applicant a result of the provide a copy of the Certificate of Incorporation change amendments or other Business Registration Certificate. If NO, provide a copy of the Certificate of Authority/Authority amendments or other Business Certificate as Attachment. 	/Organization/Limi cate as Attachmen ority of L.L.C./Reg	ted Partnersl t A.	hip (one page) including any name		
7. If applicant is a subsidiary corporation, please provide the na	ame of parent corpo	ration:			
8. Does the applicant own, lease, have an option to buy or other	erwise have control	of the propose	ed site? XES NO		
- If YES , please explain: Latham Pool Products, Inc. le	eases the site.				
 If NO, you are not eligible for a permit for this source. 					
administratively updated or temporarily permitted (e.g.	 Type of plant or facility (stationary source) to be constructed, modified, relocated, administratively updated or temporarily permitted (e.g., coal preparation plant, primary crusher, etc.): Reinforced composite plastic manufacturing 10. North American Industry Classification System (NAICS) code for the facility: 				
		s process (for	CSR30 (Title V) permit numbers existing facilities only):		
All of the required forms and additional information can be found	under the Permitting	Section of DA	Q's website, or requested by phone.		

Page 1 of 4

NSR/Title V Permit Revision Application Form (Revision form.doc) Revised - 05/2010

12A.							
 For Modifications, Administrative Updates or Te present location of the facility from the nearest state 		please provide directions to the					
 For Construction or Relocation permits, please proad. Include a MAP as Attachment B. 							
Exit 105 off I-79, go west on Hackers Creek Road, take the first	left onto Industrial Park Road, go 0.5 miles,	473 Industrial Park Road is on the left.					
2.B. New site address (if applicable): 12C. Nearest city or town: 12D. County:							
NA	4						
12.E. UTM Northing (KM): 4328.1	12F. UTM Easting (KM): 552.2	12G. UTM Zone: 17					
13. Briefly describe the proposed change(s) at the facilit Addition of curing room, which is attached to the pool pro and vinyl ester resin application in EU-1B (Pool Manufac	oduction area. Installation of RC-RTO to						
14A. Provide the date of anticipated installation or change. If this is an After-The-Fact permit application, provided happen: / /		14B. Date of anticipated Start-Up if a permit is granted:					
14C. Provide a Schedule of the planned Installation of/ application as Attachment C (if more than one uni	- ·	units proposed in this permit					
15. Provide maximum projected Operating Schedule o Hours Per Day Days Per Week	f activity/activities outlined in this application weeks Per Year	ation: NO CHANGE					
16. Is demolition or physical renovation at an existing facility involved? YES NO							
17. Risk Management Plans. If this facility is subject to	112(r) of the 1990 CAAA, or will become	ne subject due to proposed					
changes (for applicability help see www.epa.gov/cep N/A	changes (for applicability help see www.epa.gov/ceppo), submit your Risk Management Plan (RMP) to U. S. EPA Region III. N/A						
18. Regulatory Discussion. List all Federal and State a	air pollution control regulations that you	believe are applicable to the					
proposed process (if known). A list of possible applica	able requirements is also included in Att	achment S of this application					
(Title V Permit Revision Information). Discuss applica	bility and proposed demonstration(s) of	compliance (if known). Provide this					
information as Attachment D .							
Section II. Additional attachments and supporting documents.							
19. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and 45CSR13).							
20. Include a Table of Contents as the first page of your application package.							
21. Provide a Plot Plan , e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as Attachment E (Refer to Plot Plan Guidance).							
 Indicate the location of the nearest occupied structure (e.g. church, school, business, residence). 							
 Provide a Detailed Process Flow Diagram(s) showing each proposed or modified emissions unit, emission point and control device as Attachment F. 							
23. Provide a Process Description as Attachment G.							
Also describe and quantify to the extent possible and the extent possible							
All of the required forms and additional information can be	found under the Permitting Section of DA	AQ's website, or requested by phone.					
24. Provide Material Safety Data Sheets (MSDS) for a							
- For chemical processes, provide a MSDS for each compound emitted to the air. NO CHANGE							
25. Fill out the Emission Units Table and provide it as Attachment I.							
26. Fill out the Emission Points Data Summary Sheet (Table 1 and Table 2) and provide it as Attachment J.							

27. Fill out the Fugitive Emissions Dat	a Summary Sheet and provide it a	as Attachment K. NO CHANGE				
28. Check all applicable Emissions Un	•					
☐ Bulk Liquid Transfer Operations	☐ Haul Road Emissions	☐ Quarry				
☐ Chemical Processes	☐ Hot Mix Asphalt Plant	☐ Solid Materials Sizing, Handling and Storage				
☐ Concrete Batch Plant	☐ Incinerator	Facilities				
☐ Grey Iron and Steel Foundry	☐ Indirect Heat Exchanger	☐ Storage Tanks				
☐ General Emission Unit, specify						
Fill out and provide the Emissions Unit	Data Sheet(s) as Attachment L. N	N/A				
29. Check all applicable Air Pollution C	control Device Sheets listed below	V:				
☐ Absorption Systems	☐ Baghouse	☐ Flare				
	☐ Condenser	☐ Mechanical Collector				
Afterburner	☐ Electrostatic Precipitate	or Wet Collecting System				
☑ Other Collectors, specify Rotary cond	entrator and regenerative thermal	oxidizer				
Fill out and provide the Air Pollution Co	ntrol Device Sheet(s) as Attachn	nent M.				
30. Provide all Supporting Emissions Items 28 through 31.	Calculations as Attachment N, or	attach the calculations directly to the forms listed in				
31. Monitoring, Recordkeeping, Reporting and Testing Plans. Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as Attachment O. NO CHANGE						
measures. Additionally, the DAQ m						
32. Public Notice. At the time that the	application is submitted, place a C	lass I Legal Advertisement in a newspaper of general				
circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and <i>Example Legal</i>						
Advertisement for details). Please	submit the Affidavit of Publicatio	n as Attachment P immediately upon receipt.				
33. Business Confidentiality Claims.	Does this application include confi	dential information (per 45CSR31)?				
☐ YES	⊠ NO					
If YES, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "Precautionary Notice – Claims of Confidentiality" guidance found in the General Instructions as Attachment Q.						
Section III. Certification of Information						
34. Authority/Delegation of Authority. Check applicable Authority Form b		er than the responsible official signs the application.				
☐ Authority of Corporation or Other Bus	iness Entity	Authority of Partnership				
☐ Authority of Governmental Agency		Authority of Limited Partnership				
Submit completed and signed Authority	Submit completed and signed Authority Form as Attachment R . N/A					
All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.						

Received
November 19, 2020
WV DEP/Div of Air Quality

35A. Certification of Information. To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.						
Certification of Truth, Accuracy, and Completeness						
I, the undersigned Responsible Official / application and any supporting documents ap reasonable inquiry I further agree to assume r stationary source described herein in accorda Environmental Protection, Division of Air Qual and regulations of the West Virginia Division of business or agency changes its Responsible on otified in writing within 30 days of the official	pended hereto, is true, accurate, and con responsibility for the construction, modificance with this application and any amenda lity permit issued in accordance with this a of Air Quality and W.Va. Code § 22-5-1 et Official or Authorized Representative, the	anplete based on information and belief after ation and/or relocation and operation of the ments thereto, as well as the Department of application, along with all applicable rules				
	V Application for which compliance is not after reasonable inquiry, all air contaminar W use blue ink)	achieved, I, the undersigned hereby certify at sources identified in this application are in DATE: (Please use blue ink) 35C. Title: VP of				
Serving Consideration of Signed Matter Cove		EHS/Quality/Autocovers				
35D. E-mail: mattrowe@lathampool.com	36F. FAX:					
36A. Printed name of contact person (if differe	36B. Title: Consultant					
36C. E-mail: Christopher.blume@rpsgroup.com	36D. Phone: (312) 576-8058	36E. FAX:				
DI EASE CHECK ALL ADDITIONELS ATTACHMEN						
PLEASE CHECK ALL APPLICABLE ATTACHMEN Attachment A: Business Certificate Attachment B: Map(s) Attachment C: Installation and Start Up Schell Attachment D: Regulatory Discussion Attachment E: Plot Plan Attachment F: Detailed Process Flow Diagran Attachment G: Process Description Attachment H: Material Safety Data Sheets (M. Attachment I: Emission Units Table Attachment J: Emission Points Data Summar	□ Attachment K: Fugitive □ Attachment L: Emissio □ Attachment M: Air Polle □ Attachment N: Support □ Attachment O: Monitor n(s) □ Attachment P: Public N □ Attachment Q: Busines ISDS) □ Attachment R: Authorit □ Attachment S: Title V P y Sheet □ Application Fee Will	Emissions Data Summary Sheet ns Unit Data Sheet(s) ution Control Device Sheet(s) ing Emissions Calculations ing/Recordkeeping/Reporting/Testing Plans lotice as Confidential Claims by Forms ermit Revision Information pay with credit card by phone.				
Please mail an original and three (3) copies of the address listed on the first	e complete permit application with the sign t page of this application. Please DO NOT f	ature(s) to the DAQ, Permitting Section, at the ax permit applications.				
FOR AGENCY USE ONLY – IF THIS IS A TITLE V Forward 1 copy of the application to the Title For Title V Administrative Amendments: NSR permit writer should notify Title V For Title V Minor Modifications: Title V permit writer should send approximately NSR permit writer should notify Title V For Title V Significant Modifications processes NSR permit writer should notify a Title Public notice should reference both 45 EPA has 45 day review period of a draft	V Permitting Group and: / permit writer of draft permit, opriate notification to EPA and affected state / permit writer of draft permit. d in parallel with NSR Permit revision: V permit writer of draft permit, 5CSR13 and Title V permits,	tes within 5 days of receipt,				

Page 4 of 4



Attachment A Business Registration Information

West Virginia Secretary of State — Online Data Services

Business and Licensing

Online Data Services Help

Business Organization Detail

NOTICE: The West Virginia Secretary of State's Office makes every reasonable effort to ensure the accuracy of information. However, we make no representation or warranty as to the correctness or completeness of the information. If information is missing from this page, it is not in the The West Virginia Secretary of State's database.

LATHAM POOL PRODUCTS, INC.

Organization Information								
Org Type	Effective Date	Established Date	Filing Date	Charter	Class	Sec Type	Termination Date	Termination Reason
C Corporation	12/20/2012		12/20/2012	Foreign	Profit			

Organization Information	on		
Business Purpose	3399 - Manufacturing - Miscellaneous Manufacturing - Other Miscellaneous Manufacturing (jewelry, silverware, sporting & athletic goods, dolls, toys & games, office supplies (except paper), signs, gasket, packing & sealing, musical instruments, fasteners, buttons, needles & pins, brooms, brushes & mops, burial caskets)	Capital Stock	
Charter County	Lewis	Control Number	99Y8P
Charter State	DE	Excess Acres	
At Will Term		Member Managed	
At Will Term Years		Par Value	
Authorized Shares	0	Young Entrepreneur	Not Specified

Addresses	
Туре	Address
Local Office Address	176 VIKING DRIVE JANE LEW, WV, 26378
Mailing Address	787 WATERVLIET SHAKER RD LATHAM, NY, 12110 USA
Notice of Process Address	CAPITOL CORPORATE SERVICES, INC. 206 E 9TH ST, STE 1300 STE 1300 AUSTIN, TX, 787014411
Principal Office Address	787 WATERVLIET SHAKER ROAD LATHAM, NY, 12110 USA
Туре	Address

Officers	
Туре	Name/Address
Director	RUSSELL GEHRETT 375 PARK AVENUE 17TH FLOOR NEW YORK, NY, 10152
Director	ANDREW SINGER 375 PARK AVENUE 17TH FLOOR NEW YORK, NY, 10152
President	SCOTT RAJESKI, CEO 787 WATERVLIET SHAKER ROAD LATHAM, NY, 12110
Treasurer	JOHN KEMPF, CFO 787 WATERVLIET SHAKER ROAD LATHAM, NY, 12110
Туре	Name/Address

DBA			
DBA Name	Description	Effective Date	Termination Date

Page 9 of 56 11/13/2020 LPP WV - RC-RTO Amendment App 1 of 2

EQUATOR POOL PRODUCTS	TRADENAME	5/3/2013	
VIKING POOLS	TRADENAME	2/7/2013	
DBA Name	Description	Effective Date	Termination Date

Mergers				
Merger Date	Merged	Merged State	Survived	Survived State
12/26/2012	VIKING POOLS, LLC	WV	LATHAM POOL PRODUCTS, INC.	DE
Merger Date	Merged	Merged State	Survived	Survived State

Date	Amendment
12/26/2012	MERGER: MERGING VIKING POOLS, LLC, A QUALIFIED WV LIMITED LIABILITY COMPANY WITH AND INTO LATHAM POOL PRODUCTS, INC., A QUALIFIED DE CORPORATION, THE SURVIVOR
Date	Amendment

Annual Reports	
Filed For	
2020	
2019	
2018	
2017x	
2017	
2016	
2015	
2014	
Date filed	

For more information, please contact the Secretary of State's Office at 304-558-8000.

Thursday, February 13, 2020 — 1:44 PM

© 2020 State of West Virginia



I, Natalie E. Tennant, Secretary of State of the State of West Virginia, hereby certify that

LATHAM POOL PRODUCTS, INC.

Control Number: 99Y8P

a corporation formed under the laws of Delaware has filed its "Application for Certificate of Authority" to transact business in West Virginia as required by the provisions of the West Virginia Code. I hereby declare the organization to be registered as a foreign corporation from its effective date of December 20, 2012.

Therefore, I issue this

CERTIFICATE OF AUTHORITY

to the corporation authorizing it to transact business in West Virginia



Given under my hand and the Great Seal of the State of West Virginia on this day of December 20, 2012

Secretary of State



Attachment C Schedule of Planned Installation/Change

Schedule of Planned Changes

Latham is requesting three anticipated facility and operational changes to be reflected in modified Reg. 13 and Reg. 30 permits. These changes will begin once the permit has been amended.

- 1. Latham intends to construct a curing room, which will adjoin the Pool Production building. There will essentially be no emissions attributable to the new curing room.
- 2. A rotary condenser and regenerative thermal oxidizer (RC-RTO) will be installed to abate VOC emissions from gelcoat and vinyl ester resin application for EU-1B (Pool Production). General purpose polyester resin emissions will not be controlled by the new RC-RTO. This will require the construction of a dividing wall within the Pool Production Building to allow such emissions to be separately captured. There will be no net change in EU-1B and facility-wide VOC emission limits.



Attachment D
Regulatory Discussion

Regulatory Discussion

The discussion below is intended to reflect only new regulatory requirements that are of confirmed or potential relevance to changes addressed in this amendment application. Other applicable regulatory requirements, as documented in the existing Reg 13/30 permits, will continue to apply.

Rule 6

Rule 6 covers the control of air pollution from combustion of refuse, i.e. incinerators. Latham is installing a RC-RTO at their Jane Lew facility, and while the RC-RTO will combust natural gas and VOC emissions, not refuse, WVDEP requires a demonstration of PM emissions. The RC-RTO would emit 0.0326 tons of PM per year (see Table N-4 for more detail).

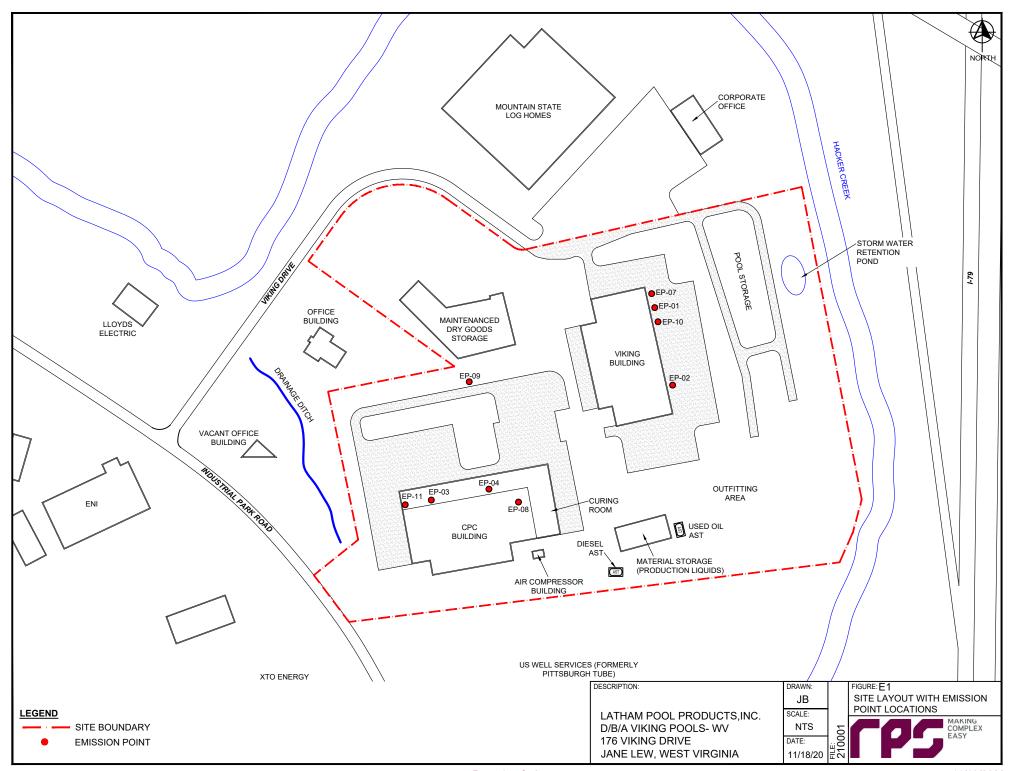
CAM

The pollutant specific emission units that involve VOC/HAP emissions are exempt from the CAM Rule because of the site's 4W NESHAP applicability. Furthermore, there is also no underlying regulatory requirement for a continuous emissions monitoring system (CEMS) to be installed at the facility.

The overspray filters used at the facility to collect PM are inherent to the process to prevent equipment from breaking down, thus it is not a control device used to achieve compliance with any emission limitation or standard. Due to this, CAM is not applicable to pollutant specific emission units involving PM.

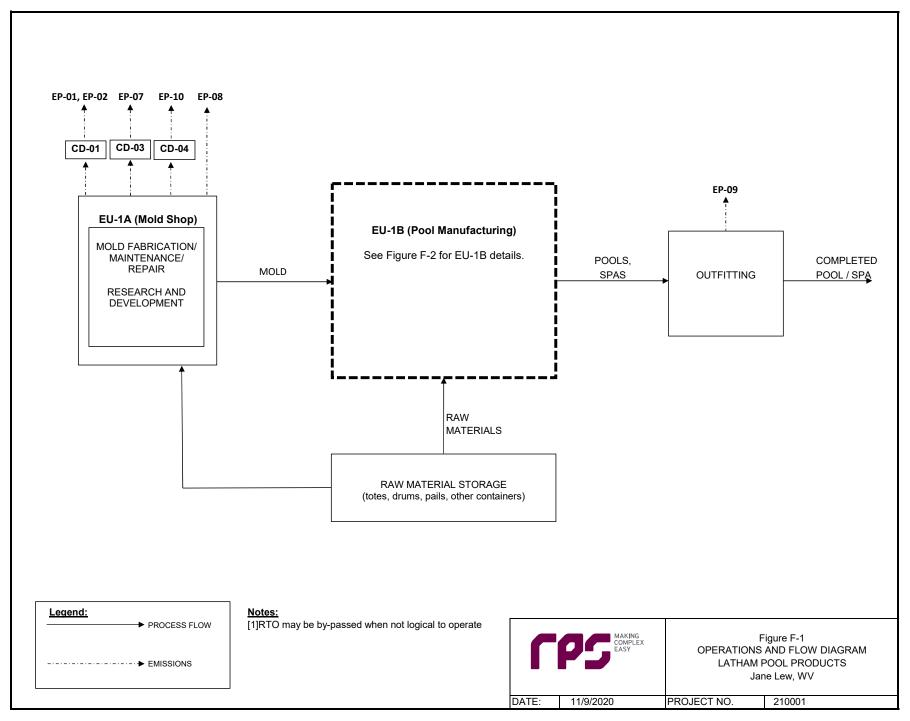


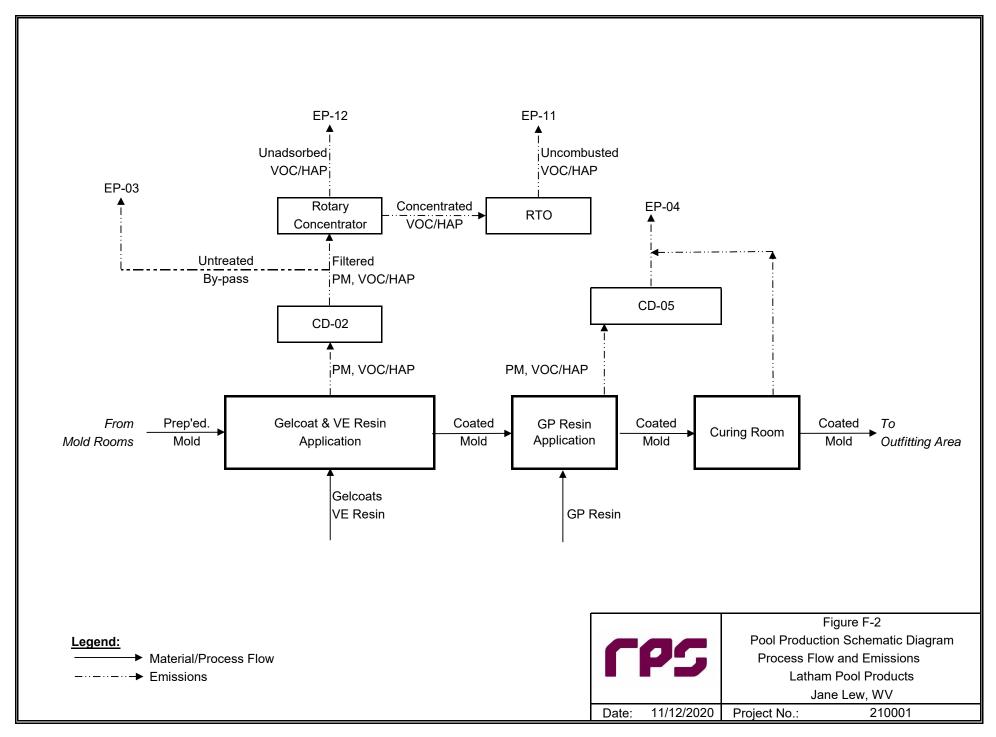
Attachment E Plot Plan





Attachment F Process Flow Diagram







Attachment G Process Description

Process Description

Latham Pool Products manufactures fiberglass reinforced pools and spas for residential markets.

Molds used to produce pools and spas are fabricated, maintained and repaired in the "Mold Shop" building (Viking Building, EU-1A). This segment of the operation involves the use of tooling gelcoat, vinyl ester resin, general purpose resin, and miscellaneous materials.

The mold is prepared by applying wax (a release agent), which takes place in materials storage bay of the Pool Production Building (CPC Building, EU-1B). The prep'ed. mold is coated using gelcoat and vinyl ester resin in the "eastern half" of the production area of the building; and subsequently using general purpose resin in the "western half".

Coated molds will be transferred to the curing room, for temporary storage; prior be being moved to the Outfitting area, where miscellaneous hardware (e.g., skimmers, returns, etc.) and features (e.g., accent tiles) will be affixed to produce the finished product.

VOC emission from gelcoat and vinyl ester usage in the Pool Production Building will be captured and routed to a new rotary concentrator and regenerative thermal oxidizer (RC-RTO) when economically and operationally beneficial.



Attachment I Emission Unit Table

Attachment I

Emission Units Table

(includes all emission units and air pollution control devices that will be part of this permit application review, regardless of permitting status)

Emission Unit ID¹	Emission Point ID ²	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type³ and Date of Change	Control Device ⁴
EU-1A	EP-01, EP-02 Exhaust System Stacks	Mold Fabrication/Maintenance/ Repair/Research and Development (Blue Viking Building)	See active permits	N/A	None	CD-01 Roll Media Filter
EU-1A	EP-07 Dust Collection Stack	Mold Fabrication/Maintenance/ Repair/Research and Development (Blue Viking Building)	See active permits	N/A	None	CD-03 EuroVac Filter
EU-1A	EP-10 Dust Collection Stack	Mold Fabrication/Maintenance/ Repair/Research and Development (Blue Viking Building)	2020	N/A	None	CD-04 EuroVac* Filter
EU-1A	EP-08 Fugitive	Final Mold Prep (Green CPC Building)	See active permits	N/A	None	None
EU-1B	EP-03 Exhaust System Stacks	Manufacturing Process - GC & VE Bypass RTO (Green CPC Building)	2020	N/A	Modification	CD-02 Roll Media Filter
EU-1B	EP-04 Exhaust Stack	Manufacturing Process - GP Build Area (Green CPC Building)	2020	N/A	Modification	CD-05 Roll Media Filter
EU-1B	EP-11 RTO Stack	Manufacturing Process - GC &VE to RC-RTO	2020	N/A	New	CD-06 RC-RTO*
EU-1B	EP-12 RC Stack	Manufacturing Process - GC & VE to RC-RTO	2020	N/A	New	CD-06 RC-RTO*
EU-02	EP-09 Fugitive	Finishing Area (Outfitting)	See active permits	N/A	None	None
	Notes:	* or equivalent				

¹ For Emission Units (or Sources) use the following numbering system:1S, 2S, 3S,... or other appropriate designation.

		Emission Units Table
Page	of	03/2007

² For Emission Points use the following numbering system:1E, 2E, 3E, ... or other appropriate designation.

³ New, modification, removal

⁴ For <u>C</u>ontrol Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.



Attachment J Emission Points Data Summary Sheet

Attachment J EMISSION POINTS DATA SUMMARY SHEET

	Table 1: Emissions Data														
Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type ¹	Ver Throug Po (Must Emissio	on Unit Inted Igh This Intinint Intinint Intinint Intinits Into Units Into Plan	Contro (Musi Emissi	ollution I Device t match ion Units Plot Plan)	Emissi (che	ime for on Unit mical ses only)	All Regulated Pollutants - Chemical Name/CAS ³ (Speciate VOCs & HAPS)	Maxii Pote Uncon Emiss	ntial trolled	Po ⁻ Cor	ximum tential ntrolled ssions ⁵	Emission Form or Phase (At exit conditions, Solid, Liquid or	Est. Method Used ⁶	Emission Concentration ⁷ (ppmv or mg/m³)
		ID No.	Source	ID No.	Device Type	Short Term ²	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr	Gas/Vapor)		
EP-03	Green CPC Building Pool Manufact uring Emission s	EU-1B	Pool Manufa cturing Building	CD-02	Fabric filter	N/A	N/A	VOCs PM/PM10	N/A	See Table N-1A, N-1B, N-2, N-3	N/A	See Table N-1A, N- 1B, N-2, N-3	Vapor Solid/Liquid	EE; MB	N/A
EP-04	Green CPC Building Pool Manufact uring Emission s	EU-1B	Pool Manufa cturing Buildin g	CD-05	Fabric filter	N/A	N/A	VOCs PM/PM10	N/A	See Table N-1A, N-1B, N-2, N-3	N/A	See Table N-1A, N- 1B, N-2, N-3	Vapor Solid/liquid	EE; MB	N/A
EP-11	GC & VE emissions to RC- RTO	EU-1B	Pool Manufa cturing Buildin g	CD-06	RC- RTO	N/A	N/A	VOCs PM/PM10	N/A	See Table N-1A, N-1B, N-2, N-3	N/A	See Table N-1A, N- 1B, N-2, N-3	Vapor Solid/Liquid	EE; MB	N/A
EP-12	GC & VE emissions to RC- RTO	EU-1B	Pool Manufa cturing Buildin g	CD-06	RC- RTO	N/A	N/A	VOCs PM/PM10	N/A	See Table N-1A, N-1B, N-2, N-3	N/A	See Table N-1A, N- 1B, N-2, N-3	Vapor Solid/Liquid	EE; MB	N/A

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

¹ Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

Attachment J EMISSION POINTS DATA SUMMARY SHEET

	Table 2: Release Parameter Data							
Emission	Inner		Exit Gas		Emission Point Ele	evation (ft)	UTM Coordinates (km)	
Point ID No. (Must match Emission Units Table)	Diameter (ft.)	Temp. (°F)	Volumetric Flow ¹ (acfm) at operating conditions	Velocity (fps)	Ground Level (Height above mean sea level)	Stack Height ² (Release height of emissions above ground level)	Northing (approximate coordinates)	Easting (approximate coordinates)
EP-03	4 ft	Ambient	50,000	N/A	1010 ft	62 ft	4328.085931	552.242033
EP-04	4 ft	Ambient	55,000	N/A	1010 ft	62 ft	4328.085931	552.242033
EP-11	4.5 ft	439-615	5,000	N/A	1010 ft	32 ft	4328.085931	552.242033
EP-12	4.5 ft	Ambient	50,000	N/A	1010 ft	32 ft	4328.085931	552.242033

¹ Give at operating conditions. Include inerts.

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² Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (ie., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).

 $^{^3}$ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. **LIST** Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. **DO NOT LIST** H₂, H₂O, N₂, O₂, and Noble Gases.

⁴ Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

⁵ Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

⁶ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m³) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO₂, use units of ppmv (See 45CSR10).

² Release height of emissions above ground level.



Attachment M Air Pollution Control Device

Attachment M Air Pollution Control Device Sheet

(OTHER COLLECTORS)

Control Device ID No. (must match Emission Units Table): CD-06

Equipment Information

1.	Manufacturer: Custom Model No.	Control Device Nar Type: Rotary con- oxidizer	ne: RC-RTO centrator/ regenerative thermal
3.	Provide diagram(s) of unit describing capture syscapacity, horsepower of movers. If applicable, state		
4.	On a separate sheet(s) supply all data and calculate	ions used in selecting or de	esigning this collection device.
5.	Provide a scale diagram of the control device show	ing internal construction.	
6.	Submit a schematic and diagram with dimensions a	and flow rates.	
7.	Guaranteed minimum collection efficiency for each	pollutant collected:	
>99	9% collection efficiency for VOC		
8.	Attached efficiency curve and/or other efficiency in	ormation.	
9.	Design inlet volume: 55,000 SCFM	10. Capacity:	
11.	Indicate the liquid flow rate and describe equipmen	t provided to measure pres	sure drop and flow rate, if any.
12.	Attach any additional data including auxiliary equotontrol equipment.	uipment and operation de	tails to thoroughly evaluate the
13.	Description of method of handling the collected ma	terial(s) for reuse of dispos	al.
	Gas Stream	Characteristics	
14.	Are halogenated organics present? Are particulates present? Are metals present?	 ☐ Yes ☐ No ☐ Yes ☐ No ☐ No 	
15.	Inlet Emission stream parameters:	Maximum	Typical
	Pressure (mmHg):		
	Heat Content (BTU/scf):		
	Oxygen Content (%):		
	Moisture Content (%):		
	Relative Humidity (%):		

16. Type of pollutant(s) controlled: ☐ SO _x ☐ Odor ☐ Particulate (type): ☐ Other (VOC)						
17. Inlet gas velocity:	66.67	ft/sec	18. Pollutant	specific gravity:		
19. Gas flow into the col ACF @	19. Gas flow into the collector: ACF @ °F and PSIA			20. Gas stream temperature: Inlet: Outlet: 439-615		
21. Gas flow rate: Design Maximum: Average Expected:	55,000	ACFM ACFM	22. Particulat	e Grain Loading Inlet: Outlet:	in grains/scf:	
23. Emission rate of each	h pollutant (speci	fy) into and out	of collector:			
Pollutant	IN Pol	lutant	Emission OUT Pollutant			Control
	lb/hr	grains/acf	Capture Efficiency %	lb/hr	grains/acf	Efficiency %
A VOC	See Table N- 1A/1B		>99%	See Table N- 1A/1B		>90%
В						
С						
D						
24. Dimensions of stack	: Heigl	ht 32	ft.	Diameter	4.5	ft.
 Supply a curve showing proposed collection efficiency versus gas volume from 25 to 130 percent of design rating of collector. 						

Particulate Distribution

26. Complete the table:	Particle Size Distribution at Inlet to Collector	Fraction Efficiency of Collector
Particulate Size Range (microns)	Weight % for Size Range	Weight % for Size Range
0 – 2		
2 – 4		
4 – 6		
6 – 8		
8 – 10		
10 – 12		
12 – 16		
16 – 20		
20 – 30		
30 – 40		
40 – 50		
50 – 60		
60 – 70		
70 – 80		
80 – 90		
90 – 100		
>100		

27. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooling, gas reheating, gas humidification):				
28. Describe the collect	ction material disposal system:			
29. Have you included	Other Collectores Control Device	ce in the Emissions Points Data Summary Sheet?		
30. Proposed Monitoring, Recordkeeping, Reporting, and Testing Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.				
MONITORING:		RECORDKEEPING:		
REPORTING:		TESTING:		
MONITORING:		ocess parameters and ranges that are proposed to be strate compliance with the operation of this process		
RECORDKEEPING: REPORTING:	Please describe the proposed re	cordkeeping that will accompany the monitoring. emissions testing for this process equipment on air		
TESTING:	pollution control device.	emissions testing for this process equipment on air		
31. Manufacturer's Guaranteed Control Efficiency for each air pollutant.				
32. Manufacturer's Guaranteed Control Efficiency for each air pollutant.				
33. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty.				

Attachment M Air Pollution Control Device Sheet

(ADSORPTION SYSTEM)

Control Device ID No. (must match Emission Units Table): CD-06

Equipment Information

1.	Name of Control Device: Rotary concentrator	Manufacturer: Custom Model No.					
3.	Provide diagram(s) of unit describing capture syscapacity, horsepower of movers. If applicable, stat	tem with duct arrangement and size of duct, air volume, e hood face velocity and hood collection efficiency.					
	Gas Stream	Characteristics					
4.	Gas Flow Rate into the Collector: ACFM @ Relative Humidity PSIA	°F					
5.	Emission Rate of each Pollutant (Specify) into and						
	IN	OUT					
	Pollutant Ib/hr grains/acf ppm A B C D E	(volume) lb/hr grains/acf ppm (volume)					
6.	LEL (lower explosive limit) for most volatile pollutar	t: Pollutant PPM					
7.	List vapor pressure (mmHg) at the operating temperature for each A pollutant in inlet stream: B C D E	Pollutant Temp MmHg					
		Characteristics					
8.	Adsorbent: Type: Zeolite adsorbent Manufacturer: Grade No.:	Maximum adsorbate loading: Ib pollutant/lb of adsorbent					
10.	. Pressure drop across unit: (in inches of water)	11. Number of beds per unit:					
12.	. Weight of adsorbent material per bed:	Adsorbent media average particle size: microns					
14.	. Adsorber geometry:	15. Temperature Range Adsorption:					
	Length: ft	Min. Temp. °F					
	Diameter: ft Bed Depth: ft	Max. Temp. °F					
	Bed Surface Area: ft ²	Average Temp. °F					
	. Cycle time for adsorption: hr . Cycle time for drying before adsorbing:	17. Frequency of adsorbent replacement: yr					
19.	19. Saturation Capacity of Pollutant on adsorbent (supply units):						
20.	20. Length of mass transfer zone: in						

Regenerative Systems

25. Steam flow rate: Ib/II Steam temp.: °F Steam pressure: PS 26. Disposition of vapors during regeneration:	21. Type of regeneration:	☐ Replacement ☐ Stream ☐ Other, specify:		
Alternate use of beds in a single unit Other (describe): 23. Cycle time for regeneration: Alternate use of beds in a single unit Other (describe): 24. Emission steam velocity through bed:	22. Method of Regeneration	າ:		
23. Cycle time for regeneration: hr 24. Emission steam velocity through bed: ft/r 25. Steam flow rate: lb/ Steam pressure: PS 26. Disposition of vapors during regeneration: 27. Guaranteed minimum efficiency Captured Pollutant Minimum Efficiency PS B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):	☐ Alternate use of	entire units	☐ Source shut down	
25. Steam flow rate: Ib/Steam temp.: %F Steam pressure: ps 26. Disposition of vapors during regeneration: 27. Guaranteed minimum efficiency per pollutant captured: A B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):	☐ Alternate use of	beds in a single unit	Other (describe):	
25. Steam flow rate: lb// Steam pressure: PS 26. Disposition of vapors during regeneration: 27. Guaranteed minimum efficiency per pollutant captured: A B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):	23. Cycle time for regenera	tion: hr	24. Emission steam velocity thro	ough bed:
Steam pressure: 26. Disposition of vapors during regeneration: 27. Guaranteed minimum efficiency per pollutant aptured: A B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):				ft/min
27. Guaranteed minimum efficiency per pollutant captured: A B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):			25. Steam flow rate:	lb/min
26. Disposition of vapors during regeneration: 27. Guaranteed minimum efficiency Captured Pollutant Minimum Efficiency per pollutant captured: A B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):			Steam temp.:	°F
27. Guaranteed minimum efficiency Captured Pollutant Minimum Efficiency Per pollutant captured: A B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):			Steam pressure	PSIA
per pollutant captured: A B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):	26. Disposition of vapors du	ıring regeneration:		
per pollutant captured: A B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):				
B C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):		efficiency Ca	ptured Pollutant	Minimum Efficiency
C D 28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):	per pollutant captured:	Α		%
28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):		В		%
28. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooli reheating, gas humidification):		С		%
reheating, gas humidification):		D		%
29. Describe the collection material disposal system:			outlet gas conditioning processes	(e.g., gas cooling, gas
	29. Describe the collection	material disposal system:		
30. Have you included <i>Adsorption Control Device</i> in the Emissions Points Data Summary Sheet?	30. Have you included Ads	orption Control Device in th	ne Emissions Points Data Summa	rv Sheet?

Please propose m	g parameters. Please propose	, and Testing eporting in order to demonstrate compliance with the testing in order to demonstrate compliance with the
MONITORING:		RECORDKEEPING:
REPORTING:		TESTING:
MONITORING:		rocess parameters and ranges that are proposed to be strate compliance with the operation of this process
RECORDKEEPING: REPORTING:		ecordkeeping that will accompany the monitoring. I emissions testing for this process equipment on air
TESTING:		d emissions testing for this process equipment on air
32. Manufacturer's Gua	aranteed Capture Efficiency for ea	ich air pollutant.
33. Manufacturer's Gua	aranteed Control Efficiency for eac	ch air pollutant.
34. Describe all operat	ing ranges and maintenance proce	edures required by Manufacturer to maintain warranty.

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8.0 GENERAL EQUIPMENT DESCRIPTION – RTO EQUIPMENT

8.01 OXIDATION CHAMBER

One (1) oxidation chamber will be provided. The oxidation chamber will be comprised of two sections located above each pair of heat recovery chambers. The combustion chamber itself will be sized at 16'-0" long x 7'-0" wide x 4'-3" tall for the specified airflow and temperature in order to provide an average of 0.82 second retention time at 1,525F.

Interr	nal Vo	olume:					
= (45	Ft2 +	7	Ft2) X	15	Ft
	=	311 I	Ft3				
Rete	ntion	Time:					
	=	22,70	0 A	CFM	@1	525 D	eg F
	=	0.82	Sec	onds			

The oxidation chamber will be fabricated from minimum 3/16" thick A36 carbon steel plate with structural reinforced flange and stiffeners. The section's flange connections will be bolted and gasketed in the field during installation to assure airtight construction.

The oxidation chamber will be provided with a hinged access door with easy opening davits for routine inspection of the burner and internal insulation.

No external insulation and cladding are provided or necessary at this location.



8.02 HEAT RECOVERY CHAMBER

Depending on RTO size, two (2) heat recovery chambers, mastic lined and internally insulated with Thermal Ceramics, or equal, insulation, will be provided. Each chamber will be nominally 7'-0"L X 7'-0"W X 8'-6"H and be fabricated from a minimum 3/16" thick A36 carbon steel plate with structural reinforced flanges and stiffeners (similar in design to the oxidation chamber).

The recovery chamber sections will be installed on a painted structural steel support, bolted and gasketed to the oxidation chamber to assure airtight construction.

The recovery chamber also includes a A36 carbon steel **proprietary Quonset style distribution cold face structure** for the specified heat recovery media. The support structure is designed for a maximum continuous operating temperature of 900°F.

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No external insulation and cladding are provided or necessary at this location.

8.03 INLET/OUTLET TRANSITION – NOT REQUIRED

Not required with use of the proprietary Quonset style cold-face support assembly inlet and outlet transitional ductwork is not required.

Due to low temperatures external skin insulation and cladding are not necessary at this location.

8.04 HEAT RECOVERY MEDIA

Many forms of heat recovery media are available. For this application, each regenerative heat recovery chamber will be provided with 1" ceramic saddles; total volume of media is at 648 Ft³. The media is chemically and thermally stable for rapid heat up and cool-down of the system. The heat exchange area is sized to yield 95% thermal energy recovery with a 3-minute cycle time. **As an optional adder, we have provided access doors above the heat recovery chambers for removal, installation, and/or washdown cleaning of the media.**



8.05 INTERNAL INSULATION

One (1) lot of internal thermal insulation will be provided. Both the heat recovery and oxidation chambers will be lined and insulated with Thermal Ceramics, or equal, insulation utilizing the *European methodology*. This method provides a row of 1" thick blanket insulation material under the normal module insulation to minimize concerns associated with outside skin hot spots.

All internal insulation is shop installed and inspected prior to shipment. Each normal module is a soft ceramic blanket fiber with 304 stainless steel reinforcement and anchor mounting hardware. The ceramic insulation modules are 6" thick 8# density in each of two (2) recovery chambers and 6" thick, 10# density in the combustion chamber. The insulation is capable of operating at 2,400°F. The internal insulation is designed to provide a 200°F skin temperature while operating at 1,650°F. (Skin temperature is based on 5-mph wind velocity and 70°F ambient temperature.)



Combustion Chamber Internal Insulation

8.06 INLET AND OUTLET MANIFOLDS

Process air will be supplied to and from the oxidizer through the inlet and outlet manifolds. The inlet and outlet manifolds will be constructed from a minimum 3/16" thick A36 carbon steel with flanged companion angle all weld construction. The manifold system will be structurally reinforced for temperature and pressure requirements.

Due to low temperatures external skin insulation and cladding are <u>not necessary</u> at this location.

8.07 PROCESS AIR FLOW CONTROL VALVES

Each of two (2) Regenerative Thermal Oxidizer (RTO) control valves utilize one (1) vertical blade type, dual seat flow control valve located under each heat recovery chamber to control the direction of flow of the process air into and out of the oxidizer. The valves include pneumatic actuators that are controlled by the Allen-Bradley PLC. The valves cycle the airflow, alternating the airflow direction through the oxidizer to maintain optimum heat recovery effectiveness during normal operation.

The valve shaft is fabricated from **304 stainless steel.** The valve housing seats and disc are fabricated from 3/16" thick A36 carbon steel. The valve components are precision machined and assembled prior to shipment. Each valve will include a Parker or equal, soft seat pneumatic actuators with mufflers and integral limit/position switches that provide a control signal to the Allen-Bradley PLC.

Due to low temperatures external skin insulation and cladding are <u>not necessary</u> at this location.







8.08 SINGLE (1) EXHAUST STACK WITH SAMPLING PORTS

The outlet manifold of the RTO will be connected to the main exhaust stack. The overall height of the RTO exhaust stack will be forty (40) feet. The stack and transition ducts are to be fabricated from A36 carbon steel and designed at approximately 54" diameter based on 4,000 fpm at anticipated maximum flow and temperature. The stack will be designed to withstand wind and seismic load in accordance with the local building codes.

The stack is a freestanding design and will include two (2) 90° separated EPA sampling ports for compliance testing when required.

Exhaust stack test platform via access ladder is provided as optional pricing, see Section 4.0, Pricing of Equipment, Section 4.0, page 10.

Due to low temperatures external skin insulation and cladding are <u>not necessary</u> at this location.

8.09 FORCED DRAFT FAN AND MOTOR

The RTO main fan will be supplied as a **forced draft configuration** as an arrangement 8, direct drive, and manufactured as A36 carbon steel by Twin City, Air Pro, or equal. The Rotary Concentrator process exhaust fan will be of an induced draft design with similar manufacturing per above. Both fans will be supplied with flexible joints at the inlet and outlet locations and designed for lateral and axial displacement/vibration on the fan.

Fan shall be single width-single inlet, with the fan wheel chosen as either a backward curved or backward inclined design. A Falk T-10 coupling, grease lubricated self-aligning, pillow-block type bearings, bolted inlet and outlet flanges, inspection door, drain and OSHA shaft/coupling guard. The housing and bearing support will be mounted to a common structural base with the motor.

The **RTO** forced draft fan will be appropriately sized for the subject oxidizer system chosen and provided with a BALDOR/RELIANCE/WEG or equal, **50 HP**, 1800 RPM, TEFC Premium Efficient, Foot mounted, 3/60/480, xxxT Frame, and cast iron.

The **Rotary Concentrator induced draft fan** will be appropriately sized for the subject oxidizer system chosen and provided with a BALDOR/RELIANCE/WEG or equal, **125 HP**, 1800 RPM, TEFC Premium Efficient, Foot mounted, 3/60/480, xxxT Frame, and cast iron.

All fans and motors are sized and ultimately designed with a nominal test block calculation at 10% extra on flow and 21% extra on static requirements.

Due to low temperatures external skin insulation and cladding are <u>not necessary</u> at this location.

8.10 VARIABLE FREQUENCY DRIVE

The process flow will be controlled by a Allen Bradley/Rockwell, or equal, pulse width modulating (pwm) variable frequency drive (VFD) system. The VFD can be installed into the **optional priced air-conditioned NEMA 12 main control panel** and provided for indoor use.

8.11 BURNER, FUEL TRAIN, AND COMBUSTION BLOWER

One (1) North American (FIVES) TEMPEST Model Low NOx ratio regulated burner design sized to provide a minimal 1.0 MMBTUH at maximum capacity. This is a direct-spark style burner with no need (dependent on insurance requirements) for a pilot gas train or redundant vent valves between the blocking and shut-off valves per NFPA 86. The burner and fuel train is designed to be **fired with liquid propane** (LP) with a **gross heat content of approximately 2,572 BTU/Ft3**. All components will be shop wired in to a burner control panel.

A burner access platform with ladder access is provided as optional pricing; see Section 4.0, Pricing of Equipment, page 10.

The combustion blower will be a Twin City or equal, with a filter and silencer on the inlet and provided with a premium TEFC xxxT, **3.0 HP**, 3,443 RPM 480V/60/3 electric motor.

All fans and motors are sized and ultimately designed with a nominal test block calculation at 10% extra on flow and 21% extra on static requirements.

The burner systems including combustion blower will be shop wired in accordance with the specifications to the Burner Control Panel, as described in 8.20 c&d. The North American burners are minimally capable of operating at 6:1 airflow turndown and 20:1 fuel turndown based on a natural gas with a heat content of approximately 1000 BTU/Ft3.

8.12 OXIDIZER FRESH AIR/PURGE DAMPER

A fresh air damper will be provided. The fresh air damper will be provided as an open/closed pneumatically actuated damper arrangement, 1% leakage when closed, and fabricated from A36 carbon steel and provide a source of clean, non-hazardous air during the oxidized purge and start-up requirements when required. The valve will be provided with proof-of-open and closure switches that will be interlocked with the purge permissive control circuit in the oxidizer.

8.13 OXIDIZER PROCESS ISOLATION DAMPER – OPTIONAL

The RTO system will be provided with a single inlet isolation valve located upstream of the inlet location of the RTO itself and designed as 1% leakage when closed. The isolation valve will be manufactured from A36 carbon steel and provided with a two-position open/closed actuator to provide a positive separation between the process exhaust and the RTO when the RTO is not in service, and during the purge and start-up cycle per NFPA 86 requirements. The valve is provided with proof-of-open/closure switches that will be interlocked with the purge permissive control circuit in the RTO.

8.14 OXIDIZER PROCESS EXHAUST BAROMETRIC DAMPER - OPTIONAL

A single (1) barometric damper assembly can be provided and installed by NESTEC, Inc. This particular damper assembly is to be designed utilizing counterweights to allow smooth opening of the damper when duct pressure decreases, and smooth closing when the duct pressure increases to the normal range of duct operating pressures. Damper is to be sized to prevent the pressure in the Buyer's process exhaust ductwork from being less than -10" w.c. under all conditions. A single proximity switch is to be provided for proof of closed position.

8.15 PROCESS EXHAUST DUCTWORK - OPTIONAL

We have assumed 100' of galvanized/aluminized steel exhaust ductwork emanating from each of two (2) exhaust stacks located on the roof top of the production building. Along with exhaust ductwork there will need to be two (2) dampers (vent to atmosphere and exhaust isolation; called face and bypass dampers) associated with each rooftop exhaust location. Along with each damper is a pneumatic operated actuator with end switches used to prove complete open and closed positions. Includes all necessary control wiring, pneumatic air piping to actuators, ductwork wooden base for structural steel support stands, and crane requirements. Please see pricing, Section 4.0 PRICE OF EQUIPMENT, Optional RTO Equipment Areas, page 10.

8.16 STRUCTURAL STEEL AND PAINT

The RTO will be installed on a structural steel base skid that supports heat recovery chambers, combustion chambers, and a painted steel burner access platform (optional). The structural steel base skid itself will be fabricated from A-36 grade carbon steel.

The skid unit will be lightly sandblasted and painted with one (1) coat of primer and one (1) coat of high temperature Sherwin-Williams enamel paint (HT-85015) prior to shipment.

8.17a SIEBU GIKEN CONCENTRATOR

One (1) Model VMUIII-3250 V40-N concentrator system with RTO combustion chamber heat source for desorption process of VOC's. Includes all necessary attaching ductwork and isolation dampers fas needed for tie-in to the 5,500 SCFM RTO. The concentrator is sized to manage 55,000 SCFM at < 100°F with a nominal turndown ratio of 10:1; having a final exhaust to the RTO at a nominal 5,500 SCFM.

See Section 10.0, SUPPLEMENTAL INFORMATION, SUB PART 10.0c, Preliminary Equipment Drawings, pages 38 and 39 for preliminary rotor layout drawing and technical information.

8.17b ROTOR CONCENTRATOR WHEELS

The concentrator wheel will consist of a **single** (1) **Model VMU III-3250 V40-N** wheel of specially designed hydrophobic Zeolite adsorption rotor for primarily styrene emissions adsorption.

The rotor will be manufactured from mineral fiber honeycomb structure, impregnated with high quality hydrophobic Zeolite adsorbent, and selected for maximum performance on VOC mixtures containing both high and low boiling compounds. The honeycomb structure is mounted in a carbon steel wheel with removable stub shafts for easy rotor replacement. The shaft is rotating in grease lubricated self-aligning standard pillow block ball bearings. The Zeolite rotor is not affected by corrosive substances such as strong acid, and is not blocked by high boiling solvents, particulate, or resinous materials.

The rotor material is inert, does not participate in or promote chemical reactions, and is non-flammable and water resistant. The hydrophobic zeolite exhibits exceptional hydrophobicity and preferentially adsorbs organic molecules. Zeolite molecules form organized ring structures in a crystalline structure, leaving a large internal pore volume of fixed and predictable size. The pore size is dependent on the number of molecules in the ring structure. The zeolite material is a crystalline alumino-silicate, where the aluminum has been replaced with silicon in a patented process. The zeolite rotor has been designed to provide a high level of cleaning capacity for the VOC's contained in your exhaust stream. With normal operation of the system, the zeolite material has shown to operate over ten years continuously without degradation. The rotor is mounted in its own housing, complete with seals and rotor drives independently operable. The rotor drives are 1/2 HP continuous duty gear motor drives designed for Class 1, Division 1, Group C and D environment. Internal wiring meets UL requirements for Class 1, Division 1 environments





8.17c ROTOR CONCENTRATOR HOUSING

The rotor concentrator housing will be manufactured from heavy gauge carbon steel, with latched and gasket access openings, thermal insulation in the high temperature sectors, and suitably coated with corrosion resistant coatings inside and out following high quality industrial manufacturing practices.

The rotor housing is designed to contain system pressures without external relief devices.

The rotor housing will be designed and manufactured in pieces to ensure that the system can be moved through the tunnel and lower level area for installation in the discussed area.



8.17d INTEGRATION OF SYSTEM

Ductwork, dampers, and actuators will be supplied for the integration of the Concentrator Housing, Main Process Fans, and RTO Unit. The integrating ductwork will be fabricated from 14-gauge A36 galvanized carbon steel and reinforced. The desorption ductwork on the concentrator to the RTO unit will be covered with 3" of mineral wool insulation and jacketed with 0.032 aluminum sheet.

8.18 SHIPPING AND HANDLING

All freight requirements are estimated within the pricing section by NESTEC, Inc. as Incoterms FCA from Fabrication facility to **Williams, CA** destination, prepay and add. See Section 4.0, Price of Equipment.

8.19 FOUNDATION – BY CUSTOMER

Foundation installation is by the Buyer. NESTEC, Inc. to provide all necessary design loading requirements for foundation. Buyer is also responsible for all anchoring requirements including the structural steel base, fans, exhaust stack, duct mounts, shimming, and grouting.

8.19 RTO MOTORS SCHEDULE

NESTEC, Inc. provides below estimated motors connected and operating HP usage table.

Service Location	QTY	Item	Estimated Operating RTO BHP	Connected RTO HP	Connected kW	Volts	Phase	Hz	Operating RPM
Main Process Induced Draft Fan	1	Motor & VFD	94.00	125.0	93.21	480	3	60	~1,771
RTO Forced Draft & Desorption Fan	1	Motor &VFD	30.10	50.0	261.00	480	3	60	~1,771
Combustion Blower	1	Motor &VFD	1.10	3.0	7.46	480	3	60	~3,443

Note: All fans and motors are provided as connected HP and ultimately designed with a test block calculation that provides a minimum 10% extra on flow and 21% extra on static requirements.

8.20 CONTROLS

8.20a Main Control Panel

The main control panel is pre-wired, shop tested and prepared for connection to the plant power source.

The RTO control panel will be tested within the limits of the assembly. All panels will receive a point-to-point wire check. Each instrument device will be exercised to insure it is performing properly. Once this test has been completed, the PLC program will be installed and checked for proper operation. At that time, the customer will be invited to sign off on the equipment, and any deviations to the contract will be corrected.

All wiring is identified at both ends with designations corresponding to the diagrammatic wiring drawings. All wiring will be stranded copper with 600-volt insulation type MTW, THHN, or THWN and color coded to the appropriate voltages.

The equipment skid mounted panel will consist of the following components:

- Allen-Bradley CompactLogix PLC newest Model 5069-L20ER
- PanelView Plus 10" Color Touch Screen newest Model 2711P-T10C21D8S
- Air Conditioning (A/C) required for this enclosure due to hot indoors location-OPTIONAL
- Fireye Burner Management System
- Endress+Hauser six (6) channel chart recorder with flash drive
- Honeywell UDC Controller for hard wired high temperature limit
- Key Lock
- E-stop Button
- Wiring trough, necessary breakers, and terminals

8.20b Main Fan and Combustion Blower VFD's

The main fan VFD and combustion blower motor starter can be provided in **the air-conditioned** (**Optional**) **NEMA 12 main control panel enclosure and suitable for indoor installation** such that there is established a single 480V/3/60 and 120V/1/60 supply wiring connection.

8.20c Transformer Panel and Local Junction Box

One (1) small enclosure each is located near the burner to house the ignition transformer and near the gas train shut-off valves and components. These panels are a NEMA 4 rated enclosures suitable for outdoors mounting and use.

8.20d Field Mounted Devices

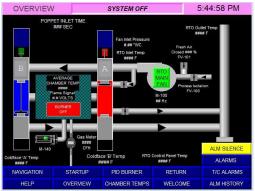
Seller will also supply necessary field components to ensure a safe and reliable system, including

- Proof of flow differential pressure switch
- One (1) Endress+Hauser inlet process exhaust flow pressure transmitter
- Pneumatic air accumulator manifold pipe with pressure relief valve
- Pneumatic air low pressure switch
- Total (8) thermocouples for temperature monitoring at the inlet (1), hopper cold face (2), burner chamber (2), each mid-bed (2), exhaust stack (1). Thermocouples shall be dual element type K for a total of 8 signals
- All liquid propane (LP) safety components supplied per NFPA 86 with IRI/FM approvable gas train
- One (1) Fire-Eye brand self-checking Ultra-Violet (UV) scanner

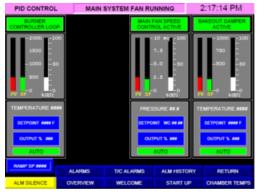
8.20e PanelView HMI Screens

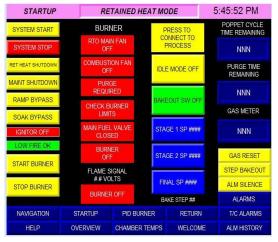
Below are a few sample views of the user-friendly human machine interface (HMI) screens.

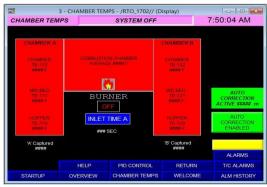


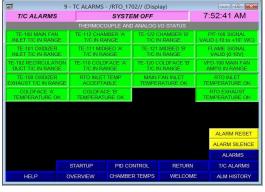


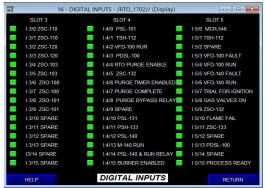














Attachment N Supporting Calculations

*Maximum Allowable VOC Emissions, 100% Bypass ^{5,6}
Latham Pool Products, Inc. d/b/a Viking Pools-WV
Jane Lew, WV

Material ^{1,2}	Neat Basis Annual Usage ³ (ton/yr)	VOC Content ² (lb/ton)	Annual Uncontrolled VOC Emissions (ton/yr)
EU-1B - Pool Manufacturing			
Gelcoat ¹	253	532	67.3
Vinyl ester resin	688	109	37.5
GP polyester resin ⁸	1,510	79	59.7
Catalyst (MEKP) ⁴	49	14	0.4
Pool Fabrication Total		Total =	164.8

Notes:

¹ For certain product brands, clear gelcoat can be applied as a filled gelcoat that can contain up to 5% acrylic flake (as applied).

² VOC contents are based on the ACMA Unified Emission Factors for styrene and methyl methacrylate for the materials represented above. Vinyl ester resin contains minor amounts of vinyl toluene, which is a VOC and is emitted at the same rate as styrene.
Clear gelcoat VOC content has been used as a conservative surrogate for all gelcoats.

³ Based on average material usage proportions from BOMs for a Corinthian 2020 Ocean Blue pool and for an Apollo mold.

⁴ Total Annual VOC Emissions include methyl ethyl ketone emissions from catalyst usage. Methyl ethyl ketone peroxide catalyst (MEKP) is added at the ratio of up to 2% of the mass of gelcoat and resin applied: MEKP contains 2% MEK (a VOC), which is emitted during gelcoat/resin application and curing. MEKP also contains dimethyl phthalate (DMP, a VOC and a HAP), which is emitted in negligible quantities.

⁵ HAP content has been conservatively assumed to be equal to VOC content.

⁶ Includes VOC and HAP emission allocations for exempt and insignificant activities not specifically represented above.

⁷Concentrator and RTO efficiency conservatively assumed to be 90%

⁸ GP polyester resin emissions are not controlled by the RC/RTO.

^{*} Disclaimer: material usage quantities and characteristics reflected in this table are presented for demonstration purposes only. Latham Pool Products requires the operational flexibility to allow for the use of a wide array of materials (and an associated wide range of material characteristics) that affect both the structural and aesthetic characteristics of the diverse shapes, sizes, styles, colors and finishes of numerous brands the company currently controls and provides based on market demand.

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Table N-1B *Maximum Allowable VOC Emissions, No Bypass ^{5,6} Latham Pool Products, Inc. d/b/a Viking Pools-WV Jane Lew, WV

Material ^{1,2} EU-1B - Pool Manufacturing	Neat Basis Annual Usage ³ (ton/yr)	VOC Content ² (lb/ton)	Annual Controlled VOC Emissions (ton/yr)
Gelcoat ¹	594	532	15.8
Vinyl ester resin	1,616	109	8.8
GP polyester resin ⁸	3,547	79	140.1
Catalyst (MEKP) ⁴	115	14	0.1
Pool Fabrication Total		Total =	164.8

Notes:

¹ For certain product brands, clear gelcoat can be applied as a filled gelcoat that can contain up to 5% acrylic flake (as applied).

² VOC contents are based on the ACMA Unified Emission Factors for styrene and methyl methacrylate for the materials represented above. Vinyl ester resin contains minor amounts of vinyl toluene, which is a VOC and is emitted at the same rate as styrene. Clear gelcoat VOC content has been used as a conservative surrogate for all gelcoats.

³ Based on average material usage proportions from BOMs for a Corinthian 2020 Ocean Blue pool.

⁴ Total Annual VOC Emissions include methyl ethyl ketone emissions from catalyst usage.

Methyl ethyl ketone peroxide catalyst (MEKP) is added at the ratio of up to 2% of the mass of gelcoat and resin applied.

MEKP contains 2% MEK (a VOC), which is emitted during gelcoat/resin application and curing.

MEKP also contains dimethyl phthalate (DMP, a VOC and a HAP), which is emitted in negligible quantities.

⁵ HAP content has been conservatively assumed to be equal to VOC content.

⁶ Includes VOC and HAP emission allocations for exempt and insignificant activities not specifically represented above.

⁷ Concentrator and RTO efficiency conservatively assumed to be 90%

⁸ GP polyester resin emissions are not controlled by the RC/RTO.

⁹ See Table N-3 Combustion Emissions

^{*} Disclaimer: material usage quantities and characteristics reflected in this table are presented for demonstration purposes only. Latham Pool Products requires the operational flexibility to allow for the use of a wide array of materials (and an associated wide range of material characteristics) that affect both the structural and aesthetic characteristics of the diverse shapes, sizes, styles, colors and finishes of numerous brands the company currently controls and provides based on market demand.

Table N-2 PM Emissions Calculations Latham Pool Products, Inc. d/b/a Viking Pools-WV Jane Lew, WV

	[A]	[B]		[C]		[D]	[E]
Material	Estimated Aggregated Annual Raw Material Usage (tons)	Maximum Solids Content (%) ²	Total Solids (tons)	Deposition Efficiency ¹	Pre-filter PM Emissions (ton/yr)	Filter Efficiency	Post- filter PM Emissions (ton/yr) ³
EU-1B - Pool Manu	facturing						
Gelcoat	594	70%	416		21		0.42
Vinyl ester resin	1,616	54%	873	95%	44	98.0%	0.87
GP polyester resin	3,547	66%	2,341	1	117		2.34

EU-1B Total = 3.63

Notes:

Post-filter PM Emissions are calculated as follows: [E] = [A] x [B] x (1 - [C]) x (1 - [D])

² Highest gelcoat/resin solids content used for emission calculations.

Gelcoat solids content = 70%
Vinyl Ester Resin solids content = 54%
GP Polyester Resin solids content = 66%

¹ Draft Guide to the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites - August 2001 - ECRM Deposition efficiency is the amount of material sprayed that is transferred to the mold (90%), plus the fraction of "over-spray" that ends up on ends depositing on other plant surfaces (i.e., 50% of over-spray); the remainder of the solids are assumed to ends up being dispersed as an aerosol and captured by the filter.

³ Assume PM10 = PM emissions (reference Chemical Engineering Handbook, Perry & Chilton, figure 20-92, paint pigment particle size)

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Table N-3 Combustion Emissions for RTO Latham Pool Products, Inc. d/b/a Viking Pools-WV Jane Lew, WV

Substance	Emission Factor ³ (lb/10 ⁶ scf)	Emissions ^{4,5,} ⁶ (ton/yr)
Nitrogen oxides (as NO ₂) ¹	1.00E+02	4.29E-01
Carbon monoxide ¹	8.40E+01	3.61E-01
Lead	5.00E-04	2.15E-06
Nitrous oxide	2.20E+00	9.45E-03
PM (total) ²	7.60E+00	3.26E-02
Sulfur dioxide	6.00E-01	2.58E-03
VOC	5.50E+00	2.36E-02
Total HAP ⁷	-	4.86E-02

Notes:

1.00E-03 mmcf/hr

NG CF=1000Btu per equipment specification

¹ AP-42 Table 1.4-1 emission factor for small boilers, uncontrolled.

² PM emission from natural gas combustion is smaller than 1.0 micron, so the same emission factor is used for PM, PM10, and PM2.5.

³ Emission factors from AP-42 Chapter 1.4.

⁴ 1020 MMBTU = 10⁶ scf of natural gas per AP-42 1.4

⁵ RTO Heat Rating: 1.00 mmbtu/hr

⁶ Hours of operation per year: 8,760

^{8,760} hours of operation is the worst-case estimate.

⁷ Total HAP emissions is the sum of single HAPs with emission factors found in AP-42 Table 1.4-1.

Table N-4
Maximum Annual Criteria Pollutant Emissions

		Maximum Annual E	Emissions (tons/yr)	
Criteria	EU-1A	EU-1B	EU-02	Source
Pollutant	Mold Fab.	Mfr. Process	Finishing	Total
VOC	12.6	164.8	0.7	178.1
PM/PM10	0.95	3.6	2.0	6.6

Notes:

Please note that there will be no changes to EU-1A emissions and EU-02 emissions, and as such calculation tables for those values have not been included in this application.

Based on the general nature of open molding operations conducted, VOC emissions from EU-1A and EU-1B will be comprised primarily of styrene, and to a lesser degree methyl methacrylate. Does not include the negligible levels of emissions from Table N-3.



Attachment P Affidavit of Publication

AIR QUALITY PERMIT NOTICE Notice of Application Proforma

Notice is given that Latham Pools Products, Inc. (d/b/a Viking Pools – WV) has applied to the West Virginia Department of Environmental Protection, Division of Air Quality (DAQ), for a permit amendment for a fiberglass pool manufacturing operation located at 176 Viking Drive, in Jane Lew, in Lewis County, West Virginia.

Latham is requesting three anticipated facility and operational changes to be reflected in modified Reg. 13 and Reg. 30 permits.

- 1. Latham intends to construct a curing room, which will adjoin the Pool Production building. There will essentially be no emissions attributable to the new curing room.
- 2. A rotary concentrator and regenerative thermal oxidizer (RC-RTO) will be installed to abate VOC emissions from gelcoat and vinyl ester resin application for EU-1B (Pool Production). General purpose polyester resin emissions will not be controlled by the new RC-RTO. This will require the construction of a dividing wall within the Pool Production Building to allow such emissions to be separately captured. There will be no net change in EU-1B and facility-wide VOC emission limits.

Particulate matter emissions from pool production will increase by approximately 0.43 tpy, and negligible increases in NOx and CO emissions will occur from natural gas combustion in the RC-RTO.

Latham is not requesting changes to emission limits for the Mold Shop Building.

The facility is currently operating. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

By: Latham Pools Products, Inc. (d/b/a Viking Pools – WV)
Rick Knicely
General Manager
176 Viking Drive
Jane Lew, WV 26378



Attachment S Title V Permit Revision Information

Attachment S

Title V Permit Revision Information

1. New Applicable Requirements Summary	
Mark all applicable requirements associated with the chang	es involved with this permit revision:
□ SIP	☐ FIP
☑ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☐ NESHAP (45CSR15)	Nonattainment NSR (45CSR19)
Section 111 NSPS (Subpart(s))	Section 112(d) MACT standards (Subpart(s))
Section 112(g) Case-by-case MACT	☐ 112(r) RMP
Section 112(i) Early reduction of HAP	Consumer/commercial prod. reqts., section 183(e)
Section 129 Standards/Reqts.	Stratospheric ozone (Title VI)
Tank vessel reqt., section 183(f)	Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	45CSR27 State enforceable only rule
45CSR4 State enforceable only rule	Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	Compliance Assurance Monitoring (40CFR64) (1)
☐ NO _x Budget Trading Program Non-EGUs (45CSR1)	□ NO _x Budget Trading Program EGUs (45CSR26)
(1) If this box is checked, please include Compliance Assur Specific Emission Unit (PSEU) (See Attachment H to Title explain why Compliance Assurance Monitoring is not ap	V Application). If this box is not checked, please
2. Non Applicability Determinations	
List all requirements, which the source has determined permit shield is requested. The listing shall also include	
Permit Shield Requested (not applicable to Mino	or Modifications)

All of the required forms and additional info	rmation can be found u	nder the Per	mitting Section of DAQ's website, or requested by phone.
3. Suggested Title V Draft Permit L	anguage		
Are there any changes involved vertexision? ✓ Yes No If Yes			sion outside of the scope of the NSR Permit
(including all applicable requiren /recordkeeping/ reporting requires	nents associated warents), OR attach mit or Consent Ord	ith the per a marked ler number	age for the proposed Title V Permit revision rmit revision and any associated monitoring up pages of current Title V Permit. Please r, condition number and/or rule citation (e.g.
A rotary concentrator and regenemissions from gelcoat and VE r			C-RTO) will be installed to abate VOC
			ched. Latham wants permit language to roperational and economic needs.
	to reflect the instal		due to the nature of the requested changes. the RC-RTO that is flexible to their
		_	
4. Active NSR Permits/Permit Deter	rminations/Consei	nt Orders	Associated With This Permit Revision
Permit or Consent Order Number	Date of Issu	ance	Permit/Consent Order Condition Number
R13-2332G	11/09 /2020		
R30-04100045-2017(MM01)	06/30/2020		
	/ /		
5. Inactive NSR Permits/Obsolete P	ermit or Consent	Orders Co	onditions Associated With This Revision
Permit or Consent Order Number	Date of Issua	ince	Permit/Consent Order Condition Number
	MM/DD/YYYY		
	/ /		
	/ /		
6. Change in Potential Emissions			
Pollutant		Ch	ange in Potential Emissions (+ or -), TPY
See Attachment N, Table N-5 for facil	ity emissions.		
All of the required forms and additional info	rmation can be found u	nder the Per	mitting Section of DAQ's website, or requested by phone.

Noi	101		4 47 47
	C	This certification must be signed by a responsible official. A certification will be returned as incomplete. The criteria for Modification Procedures are as follows:	applications without a signed rallowing the use of Minoi
	i.	Proposed changes do not violate any applicable requirement;	
	ii.	Proposed changes do not involve significant changes to exist	ting monitoring, reporting, or
		recordkeeping requirements in the permit;	
	iii.	Proposed changes do not require or change a case-by-case dimitation or other standard, or a source-specific determination	determination of an emission
		ambient air quality impacts, or a visibility increment analysis:	
	iv.	Proposed changes do not seek to establish or change a permit terr	m or condition for which there
		is no underlying applicable requirement and which permit or con	ndition has been used to avoid
		an applicable requirement to which the source would otherwise Such terms and conditions include, but are not limited to a federal	be subject (synthetic minor).
		used to avoid classification as a modification under any provision	on of Title I or any alternative
		emissions limit approved pursuant to regulations promulgated u	inder § 112(j)(5) of the Clean
	v.	Air Act;	Tide I of the Oleve At Acc
	٧.	Proposed changes do not involve preconstruction review under 7 45CSR14 and 45CSR19;	little I of the Clean Air Act or
	vi.	Proposed changes are not required under any rule of the D	irector to be processed as a
		significant modification.	•
pro- peri pro- the	cedures m mits, emis cedures an State Impl	significant modification; ding subparagraph 45CSR§30-6.5.a.1.A. (items i through vi above may be used for permit modifications involving the use of econsisions trading, and other similar approaches, to the extent that surre explicitly provided for in rules of the Director which are approve plementation Plan under the Clean Air Act, or which may be otherw	momic incentives, marketable ach minor permit modification and by the U.S. EPA as a part of
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